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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,061	09/04/2002	Rainer Blum	P 290585	8997
909	7590	11/28/2003	EXAMINER	
PILLSBURY WINTHROP, LLP			PADGETT, MARIANNE L	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			1762	

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,061

Applicant(s)

Blum et al

Examiner

ML. Palsel A

Group Art Unit

1762

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 2/21/02 & 10/16/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-14 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-14 is/are rejected.
- ☒ Claim(s) 4-11 (multiple - multiple dependent) is/are objected to. *fourth amendment had it entered.*
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____

- ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7 (2/21/02) ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

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1. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of relative terms that lack clear metes and bounds in the claims, or lack definitive definitions in the specification or cited relevant prior art, is vague and indefinite. In the claims, see "high" describing "high-energy radiation," and "near" in "near-infrared" (p.4-5, bridging paragraph is noted to give prefixes, but not a definition). It is further noted that the wavelength values claimed in 2, and taught on p.4 as NIR include most of the visible light spectra as well as part of the IR spectra, hence what applicants are actually claiming is unclear. See except from UV curing: Science and technology, chapter on light sources, p. 97-98.

It is noted that double ranges in claims are now considered acceptable by PTO management, but the claims are only limited to the broadest range claimed in that particular claim, i.e. the narrower limits will be treated as optional.

In claim 4 "the coats" lacks proper antecedent basis due to a disagreement between plural and singulars, so that it is unclear how many coatings are being claimed. Standardization of terminology is recommended. Specifically, see "coat" (claim 1); "coats" (claim 4); "coating" (claim 5), etc.

The preamble of claim 12 does not make much sense as written, "An apparatus for insulating electrical components" does not described what the apparatus does or is a means for, i.e. it doesn't really give any intended use, only what objects the unspecified intended use might be related to.

Claim 9, as amended to depend from claim 1, has an unclear relationship to the already required step to NIR curing. Is the new NIR treatment the same or different? If different, how does the claimed NIR curing relate to the thermal curing introduced in claim 9?

In claim 10, the "impregnation" lacks any antecedent basis, since no impregnation ever positively or necessarily occurred. Claim 1 only requires "applying a coat of...", that the composition /lacquer of

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that coat is capable or may be used for casting and impregnation does not mean or require that either or both ever be done.

2. The disclosure is objected to because of the following informalities: See above problem concerning, the disclosure of NIR on p. 4-5.

Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-2 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0,065,147 to Buckley et al.

Due to the above discussed confusion concerning the relative term near infrared (NIR), the range is unclear. Therefore, this rejection is being made as a 102/103, and NIR will be considered to read on any

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IR curing, or that any IR curing is an obvious means given the confusion on the range of NIR discussed above.

In Buckley et al, see the abstract; figures; page 1, lines 1-15; page 2, lines 10-37; (IR or UV); page 3, lines 5-18 (applied as liquid and gelled); and page 7, lines 26-p.8, line 4.

5. Claims 2-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley et al.

Choice of particular wavelengths will depend on the specific composition and its absorption characteristics, and as such would have been determined and optimized therefore, and various ranges of IR or visible light are old and well known for curing, although in applicant's claim, it is not clear what is being employed. Given Buckley et al's general teachings of liquid IR curable insulating material to enclose electrical components, it would have been obvious to one of ordinary skill to employ conventional and standardize application techniques like immersion coating, and standard control procedures for the curing light source, in order to optimize the cure and results.

Claim 2 is a selection of a wavelength range, however, such a selection can be considered inventive only if it has unexpected effects or properties. Page 4, lines 20-24, of the description indicates that, in this range, the NIR radiation can be generated comparatively easily and it easily controllable and that it covers the range, which is optimal for curing the coating material. However, these advantages are foreseeable and a person skilled in the art would select the claimed wavelength range according to the circumstances.

These claims concern radiation intensities (Claims 4 and 5), additional heating processes (Claims 5-9 and 11), impregnation of the components (Claim 10) and adjustments to and filtering of the NIR radiation sources (claims 13 and 14) with which a person skilled in the art is either familiar or which he would consider routine possibilities in view of familiar considerations, in particular since the

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advantages afforded thereby can easily be foreseen. Therefore the subject matter of claims 3-11, 13 and 14 likewise are obvious variations on the basic process.

6. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley et al as applied to claims 1-14 above, and further in view of Lienert (DE 19648133).

Lienert is similarly covering or impregnating polymerizable monomer on electrical components, and substantiates above arguments for employ combinations of known curing techniques therefore, specifically using heat and radiation to effect a process of gelling and curing as discussed in Buckley et al and claimed by applicant.


7. Any inquiry concerning this communication should be directed to M L. Padgett at telephone number 703-308-2336, or after mid December (9th or 10th) at (571) 272-1425, on M-F from about 8:30 am – 4:30 pm; and Fax # (703) 872-9306

M. Padgett/lap

November 17, 2003

Corrected November 25, 2003

Corrected November 26, 2003



MARIANNE PADGETT
PRIMARY EXAMINER